

CarnegieMellon
HeinzCollege

Master of Entertainment Industry Management

Course Information	What Makes us Play: The Craft of the Video Game Course Number: 93-860 Semester Credit Hours: 4, Class Meetings, 4: Sat. 3/23 at 10am, Sat. 3/30 at 10am, Sat. 4/13 at 2:30pm, and Sat. 4/27 at 2:30pm Instructor: Cheryl Platz < cheryl@ideaplatz.com >	
Description	Games have existed for almost as long as humans have walked the earth, but the video gaming industry has emerged as an economic powerhouse in recent decades. The ability to create and manipulate digital worlds completely ... well, changed the game. But what differentiates a successful game from a failure? What draws people to games, and what keeps people coming back? In this short class, students will explore the basics of game design and learn how today's most successful game developers connect a solid game design with the realities of game development in order to captivate and entertain players. This course touches on a wide variety of topics drawn from cognitive psychology, human-computer interaction, visual design, storytelling, software engineering, marketing, and the business world to paint a broad picture of the art and craft of gaming, giving students the basic ability to understand what conditions are necessary for a great game to thrive.	
Learning/ Course Objectives*	By the end of this course, students should be able to:	
	Learning Objective	How Assessed
	Recognize the fundamental principles of game design and development	Game Design Craft Quiz (Week 3) Elements of Fun Case Study (Week 4)
	Understand the difference between traditional and live service games, and how the game design challenges differ for each model	Game Design Craft Quiz (Week 3)
	Connect the game design and production considerations in class to current events in the game industry	Class discussion
	Reflect upon the social aspects of gaming including multiplayer and online experiences	Class discussion Participation in class gaming experience(s)
	Evaluate how the game industry defines, approaches, and works with "fun" and player behavior	Elements of Fun Case Study (Week 4)
Course Policies and Expectations	Absences/Tardy We only have a short time together, so please do your best to be present and be ready to work. Should you have any problems, please contact me prior to class. Respect & Safety The games industry is a wide space, but it can sometimes elicit strong or controversial opinions. Students must always treat each other with respect and approach this space as a space of learning. When engaging in gaming for class or recreation, please be safe & remember that players on the other side are humans. In no way do we condone any "experimentation" with first-person toxic behavior. University policies should be followed at all times, even when gaming for academic research.	

Evaluation* Method	Student grades will be weighted based on the following evaluation criteria (**see Student Deliverables):	
	Class process, participation and development	40%
	Game Development Craft Quiz**	20%
	Elements of Fun Case Study**	40%
Student Deliverables	This class includes two deliverables that comprise part of the student's grade. Both have an in-class delivery element.	
	Deliverable 1: Game Development Craft Quiz (Week 3)	
	Deliverable type	Quiz
	Delivery method	In-class (paper)
	AI allowed?	No
	Description	This lightweight quiz will check student comprehension on the topics covered in sessions 1 and 2, which encompass the core game development portion of the course. There will be a mix of multiple-choice questions for certain fact-based questions, and a few short open answer questions to check comprehension and engagement. No external reading outside of class time should be required if students are engaged and paying attention.
	Deliverable 2: Elements of Fun Case Study	
	Deliverable type	Presentation deck and live presentation
	Delivery method	In-class presentation PDF or Slides (document) Essay (document)
	AI allowed?	Supporting research and generating supporting illustrations only. No use for generating written text in essay.
	Description	Choose a game. Write a 750-1000-word essay in APA (3-4 pages) that summarizes the elements of fun and the positioning of that game in the game market, and then prepare a 5-minute summary presentation of your findings to share in class (20 slides maximum, animated GIFs or short videos within the time limit are acceptable). You should expect to spend a few hours gaming and then some time preparing your essay and deck. - Part 1 of 3: Game Basics - o What game did you choose, and how is it positioned as a game? Single or multiplayer? Live service game? Who is the publisher, who is the developer (if separate), and when was the game published? What platforms does it support? - Part 2 of 3: Game Loop - o Name the top 1-2 elements of fun that are present? How do they impact the core game loop? - o What is your favorite part of this game? What makes you feel the best when playing? - o Bonus: Identify one thing the game could do better in your opinion. - Part 3 of 3: Monetization - o How does this game make money from players? How does the spending of money impact the game loop, if at all? Do you feel that you got good value for your money?

	Evaluation	Each student submission (written work and 5-minute presentation) will be evaluated on the following: - Game Basics: (15%) Does the presentation reasonably identify <i>this specific game's positioning in the market</i> based on conditions we've discussed? - Game Loop: (35%) Does the presentation reasonably identify one or more core elements of fun that <i>drive this specific game</i>? - Monetization: (25%) Does this presentation reasonably identify one or more ways in which the business model <i>impacts the gameplay experience</i>? - Personal perspective: (25%) Does the presentation reasonably reflect the <i>student's personal perspective based on hands-on gameplay</i> as opposed to an AI powered or repurposed review analysis?
	Suggested games	If you're new to gaming, here's a starter list of low cost or free-to-play games to choose from. Feel free to select games not on this list, but you may find them less accessible for new players. - The Sims 4 (PC) - TeamFight Tactics (PC / Mobile) - Among Us (PC, Mobile, Console) - Five Nights at Freddy's (PC, Mobile, Console) - Fall Guys (PC, Console) - Hearthstone: Heroes of Warcraft (PC, Mobile) - Genshin Impact (PC, Console, Mobile) - Marvel Mobile Strike Force (Mobile only)
Suggested Reading	Strongly Recommended (the MEIM library has copies of all of these books) <u>A Theory of Fun for Game Design</u> by Raph Koster This book is considered required reading across the industry for those interested in game design and is an enjoyable illustrated read. Optional Reading The Secret Science of Games by John Hopson <i>Great first-person account of learnings acquired as a games researcher, and how players surprise game designers with their behavior and preferences</i> Art of Game Design: A Book of Lenses by Jesse Schell <i>The go-to textbook for those looking to work in the field of game design or just understand game design more deeply. Jesse teaches at Carnegie Mellon's Entertainment Technology Center.</i> Design Beyond Devices: Creating Multimodal, Cross-Device Experiences by Cheryl Platz <i>For cross-platform games (console/PC/mobile), those building game support platforms, or those working in augmented/virtual reality, this book will supplement the game design textbooks with a look at the human-computer interaction side of the equation necessary for success.</i>	

Class Participation Rubric	Class participation (which includes your General Attitude, Communication Skills, Organizational Skills and Creativity and Innovativeness) is important in this class because in the real world there are many group dynamics and meetings that will require your input in the room and on your feet—as a writer, producer, agent or executive. The industry is a collaborative medium and in order to be successful you will need to have the ability to think on your feet, present your ideas articulately and succinctly and contribute to group brainstorming sessions. You will also need to give and receive critiques with diplomacy and grace. Our assessment of you will reflect all of these aspects of participation in addition to professional presentation, enthusiasm, improvement throughout the course and punctuality.																																		
		A Grade	B Grade	C Grade	D/R Grade																														
	Frequency and Quality	Attends class regularly and <i>always contributes</i> to the discussion by raising thoughtful questions, analyzing relevant issues, building on others’ ideas, introducing original ideas, synthesizing across discussions, expanding the class’ perspective, and appropriately challenging assumptions and perspectives	Attends class regularly and <i>sometimes contributes</i> to the discussion in the aforementioned ways.	Attends class regularly but <i>rarely contributes</i> to the discussion in the aforementioned ways.	Attends class regularly but <i>never contributes</i> to the discussion in the aforementioned ways.																														
Grading Scale*	<table><tr><td>A+</td><td>99.0-100%</td><td>Exceptional</td></tr><tr><td>A</td><td>94.0-98.9%</td><td>Excellent</td></tr><tr><td>A-</td><td>91.0-93.9%</td><td>Very Good</td></tr><tr><td>B+</td><td>88.0-90.9%</td><td>Good</td></tr><tr><td>B</td><td>84.0-87.9%</td><td>Acceptable</td></tr><tr><td>B-</td><td>81.0-83.9%</td><td>Fair</td></tr><tr><td>C+</td><td>78.0-80.9%</td><td>Poor</td></tr><tr><td>C</td><td>74.0-77.9%</td><td>Very Poor</td></tr><tr><td>C-</td><td>71.0-73.9%</td><td>Minimum Passing</td></tr><tr><td>R</td><td>below 71 pts (< 71%)</td><td>Failing</td></tr></table>					A+	99.0-100%	Exceptional	A	94.0-98.9%	Excellent	A-	91.0-93.9%	Very Good	B+	88.0-90.9%	Good	B	84.0-87.9%	Acceptable	B-	81.0-83.9%	Fair	C+	78.0-80.9%	Poor	C	74.0-77.9%	Very Poor	C-	71.0-73.9%	Minimum Passing	R	below 71 pts (< 71%)	Failing
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Course/ Topical Outline	This course includes 4 sessions, each with a different theme: - Class 1 - Game Design Essentials (March 23) - Class 2 - Living Games, from single player to live service (March 30) - Class 3 - Social Gaming: Creating community at scale (April 13) - Class 4 - Multi-Platform Experiences: Expanding Markets and Mindshare (April 27)	
	Class 1: March 23 10:00 AM	
	Topic	Game Design Essentials
	Abstract	What is fun, anyway? We look at some of the most well-respected takes on what makes games worth playing. What game design principles cut across all genres? How do game designers evaluate what fun looks like? How does the human brain influence how we perceive fun in a game? And how do we craft convincing worlds in which players can play?
	Session Topics	Module 1: Theory of Fun (Human motivations for play) Module 2: Lenses for Game Design (How to approach a game design) Module 3: World Building (Considerations for creating an immersive world)
	Optional Context	Understanding Well-Being in Digital Spaces (Sesame Workshop)
	Class 2: March 30 10:00 AM	
	Topic	Living Games, from single player to live service
	Abstract	So you have a great game loop. Now what? How do you BUILD it, and how do you keep it fun and engaging once you've released it to players? Games are no longer a single CD-ROM burned into time – the advent of the Internet decades ago has created a new reality where games must adapt in real time with the needs of the audience – and the technology. But does every game need to be a live service game... and what about all these layoffs? We will explore the basic realities of game development and monetization and how they impact today's game design decisions.
	Session Topics	Module 1: Building the Fun (Software Development Roles & Lifecycle) Module 2: The Fun Business (Game Positioning: Traditional v Live Service) Module 3: A Fruitful Game Loop (How the need for \$ drives game design)
	Optional Context	Articles (from provided PDFs): Four Big Takeaways from the Biggest Games of 2023 (Game On) How Influencers Helped Riot Games turn Valorant into a Gen Z Hit (Bloomberg) A \$300 Million Spider-Man 2 Budget, Sony's Future and AAA Unsustainability (Forbes) The Impact of 16,000 Game Industry Layoffs in One Chart (PC Mag) Cyberpunk 2077 Should Not Have Won Best Ongoing Game at the Game Awards (TheGamer) Optional videos: PUBG was great until it wasn't (case study, 20m) League of Legends: Origins (documentary, 1h19m)

Class 3: April 13 2:30 PM	
Topic	Social Gaming: Creating community at scale
Abstract	Many games in this generation have some form of multiplayer element, and it almost seems to be a requirement for AAA titles. Why is that? What separates a good multiplayer experience from a bad one? Creating a thriving multiplayer experience is far more than just adding another player to the game – it requires an understanding of how humans engage as a collective.
Session Topics	Module 1: The Who and Why of Multiplayer (Collaboration and Competition) Module 2: Prosocial Gaming Communities (Game Design, Policies, & Moderation) Module 3: Emergent Gameplay (Mods, Hacks, and Community Powered Events)
Evaluation	In-class evaluation: Game Development Craft Quiz (20% of grade)
Optional Context	Disruption and Harms in Gaming framework

Class 4: April 27 2:30 PM	
Topic	Multi-Platform Experiences: Expanding Markets and Mindshare
Abstract	The consequence of success on a single platform is usually pressure to release on a second platform. This is usually easier said than done unless you're approaching your work with a multi-platform mindset from the beginning. We take a look at the current players in the hardware and software landscape in gaming, and how these can influence your game design choices. What are the popular game engines, and how do they make it easy or hard to develop on different platforms? What are the major gaming marketplaces and how do they influence player behavior? And how do you decide when a new technology like VR or a new console is appropriate?
Session Topics	Module 1: The State of Tech (Game development engines and hardware) Module 3: The State of Humans (Multimodality) Module 4: The State of Platforms (How games, esports, and campaigns get to players)
Deliverables	In-class presentations: Elements of Fun case study (40% of grade)
Optional Context	Chapter excerpts from Design Beyond Devices: - Chapter 7: Spectrum of Multimodality - Chapter 9: Lost in Transition Browse (lightly) example console technical requirements: - Certification Top Failing Test Cases for Console (Xbox) - Original PlayStation 1 Technical Requirements Checklist (PDF) Videos: - Unreal in 100 Seconds (Fireship on YouTube – watch .75 speed!)

Plagiarism and cheating notice*	Plagiarism and other forms of academic misrepresentation are viewed as extremely serious matters. Misrepresentation of another's work as one's own is widely recognized as among the most serious violations. The violation is clearly flagrant when it occurs as plagiarism on a required paper or as cheating on an examination, including take-home as well as in class examinations. The punishment for such offenses can involve expulsion from the MEIM Program and Heinz School. Cheating includes, but is not limited to: - Plagiarism (explained below) - Submission of work that is not the student's own - Submission or use of falsified data - Unauthorized access to an exam or assignment - Use of a stand-in for an exam - Use of unauthorized material in the preparation of an assignment or during an examination - Supplying or communicating unauthorized information to another student for use in an assignment or exam - Unauthorized collaboration on an assignment. Collaboration must be explicitly permitted by an instructor for it to be considered authorized. - Submission of the same work for credit in more than one course - Plagiarism is the failure to indicate the source of work either with quotation marks or footnotes. - The source can be a phrase, a graphic element, a proof, specific language, or an idea derived from the work of another person. Note that material on the web is another person's work and is therefore equally subject to the rules on plagiarism and cheating as any other source material. Cheating and/or plagiarism on an assignment will result in a failing grade (0 points) for that assignment. The assignment in which the cheating occurs will <i>not</i> be excluded from the offending student's assignments included in grade calculations; the points for that essay zero (0) will be factored into the grade. Furthermore, the cheating student's final grade will be reduced one full letter grade. A cheating student's final grade will be impacted significantly. In addition, cases of cheating and plagiarism will be submitted to and reviewed by the Dean's Office; more severe penalties may be imposed, <i>up to and including expulsion from the Heinz School</i>. <i>Academic Dishonesty:</i> Students are expected to maintain the highest ethical standards inside and outside the classroom. Cheating on exams and term papers (i.e. plagiarism and unauthorized collaboration) is obviously discouraged and will be treated appropriately. The usual penalty for violations is a failing grade for the particular assignment in question; however, in some instances, such actions may result in a failing grade for the course.
Artificial Intelligence Policy:	In this class, use of AI will be limited, as it is important to experience some gameplay viscerally to fully understand the impact of the game mechanics and the cognitive psychology behind fun, even if you do not plan on becoming a gamer yourself. You can use ChatGPT and other LLMs to help you learn and explore the vast space of gaming – but you may not use these tools to copy and paste or generate first order analysis that you submit as your work. In order to develop the “muscle” of game design, you must play and experience these games firsthand. For case studies, you may not use AI to generate analysis or critique – it must be based on your direct gameplay experience, or firsthand research performed by you. Screenshots or snapshots of your gameplay

experience are encouraged, as well as firsthand insights like how you did in a round or what characters you played to help bring the experience to life.

When preparing your final presentation, you may use DALL-E or other generative image AI to produce clip art, but you must always cite when AI is used to generate content of any kind in your assignments.

In general, you may not use AI to:

- Generate content that you cut and paste into an assignment with a written component without quotations and a citation
- Generate content that is not paraphrased without a citation
- Generate bibliographies for topics that you haven't researched yourself
- Generate other content (images, video, others) unless expressly permitted and following provided guidance.
- Otherwise use or present generative AI content that you pass off as your own work, when really it is not

If you use AI:

- You must acknowledge the use of AI tools within your work.(APA allows you to cite AI)
- You should recognize that large language models often provide incorrect information, fake citations, contradictory statements or incorporate plagiarized materials